

What is claimed is:

1 A cache memory employing a set associative system,
for generating a valid bit for showing presence of
5 validity of a cache data, comprising:

storage for storing an address tag of an address of a
cache data and a first valid bit for showing presence of
validity of said cache data in a set of blocks in response
to an index; and

10 reset means for storing a second valid bit
corresponding to said first valid bit, and resetting said
second valid bit,

wherein said valid bit is generated based on the first
valid bit and the second valid bit.

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2 A cache memory recited in claim 1, characterized in
that said valid bit shows validity in case that both of
the first valid bit and the second valid bit show validity,
and shows invalidity in case that either the first valid
20 bit or the second valid bit shows invalidity.

3 A cache memory recited in claim 1, wherein said reset
means is common to each way.

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4 A cache memory recited in claim 1, characterized in

that, in case that said reset means resets the second valid bit, said first valid bit is cleared via write means for writing the first valid bit into the storage.

5 **5** A cache memory recited in claim 4, wherein said first valid bit is selectively cleared via the write means.

10 **6** A control method of controlling a reset of a cache memory employing a set associative system, for generating a valid bit for showing presence of validity of a cache data, comprising the steps of:

15 storing an address tag of an address of a cache data and a first valid bit for showing presence of validity of said cache data in a set of blocks in response to an index;

 storing a second valid bit in response to said index; resetting said second valid bit; and

 generating said valid bit based on said first valid bit and said second valid bit.

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7 A control method recited in claim 6, characterized in that said valid bit shows validity in case that both of the first valid bit and the second valid bit show validity, and shows invalidity in case that either the first valid bit or the second valid bit shows invalidity.

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8 A control method recited in claim 6, characterized in
that, in case that the second valid bit is reset, the
address tag and the first valid bit are stored and said
5 first valid bit is cleared.

9 A control method recited in claim 8, wherein said
first valid bit is selectively cleared.

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